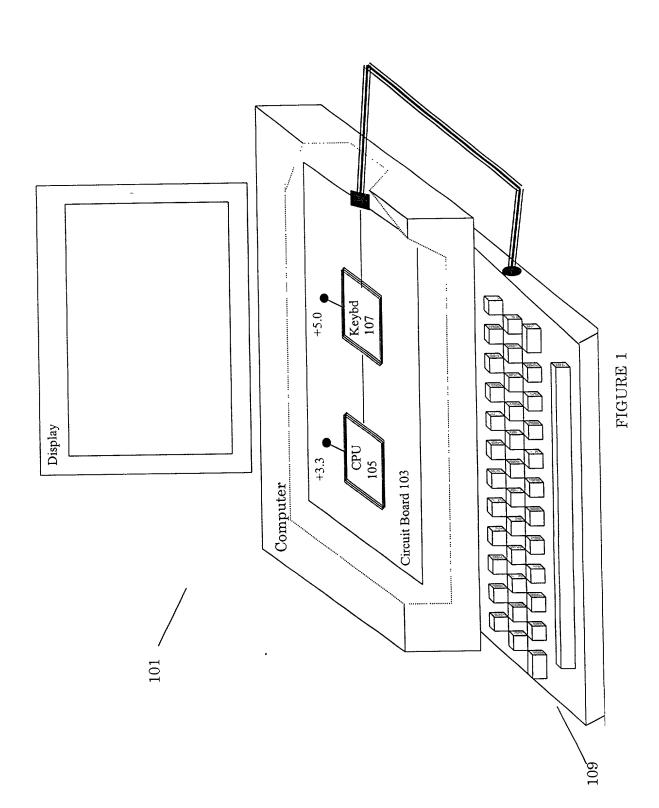
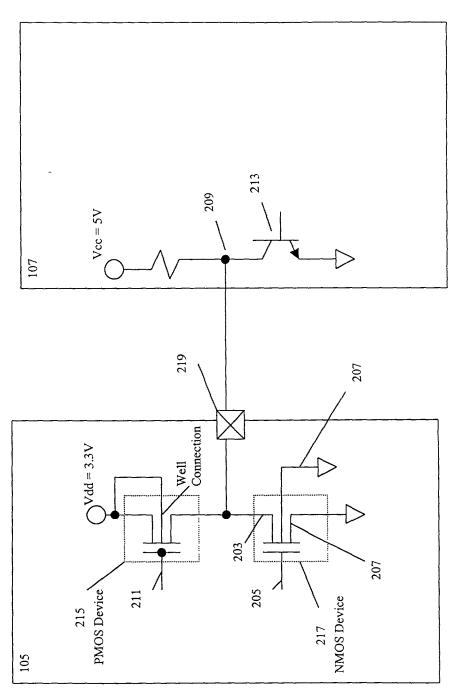
Docket No.: 41980/NJP/B600
Inventor(s): Janardharan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 1 of 23



Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit .

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES LARGE POWER SUPPLY VARIATIONS

Sheet <u>2</u> of <u>23</u>



Prior Art

Figure 2

Docket No.: 41980/NJP/B600
Inventor(s): Janardharan S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 3 of 23

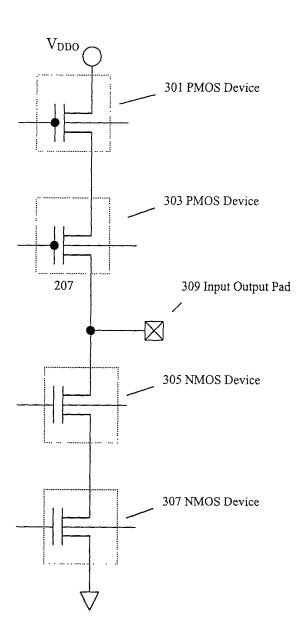


Figure 3

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 4 of 23

Sheet <u>4</u> of <u>23</u>

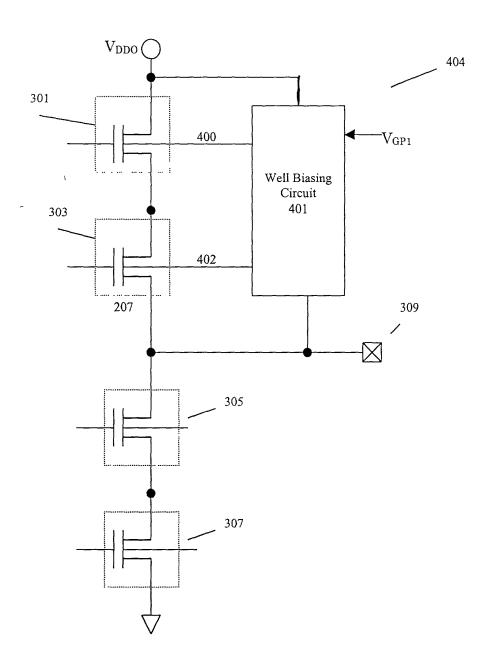


Figure 4

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit .

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 5 of 23

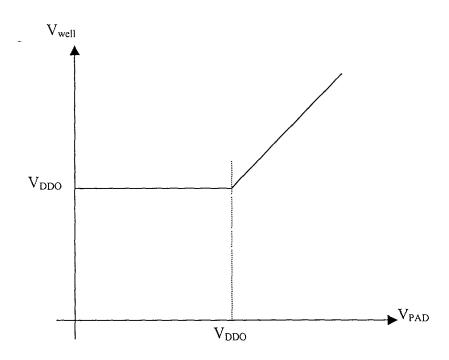


Figure 5

Nicholas J. Pauley 41980/NJP/B600 Attorney: Docket No.: Inventor(s): Janardhanan S Ajit

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES LARGE POWER SUPPLY VARIATIONS

Sheet 6 of 23

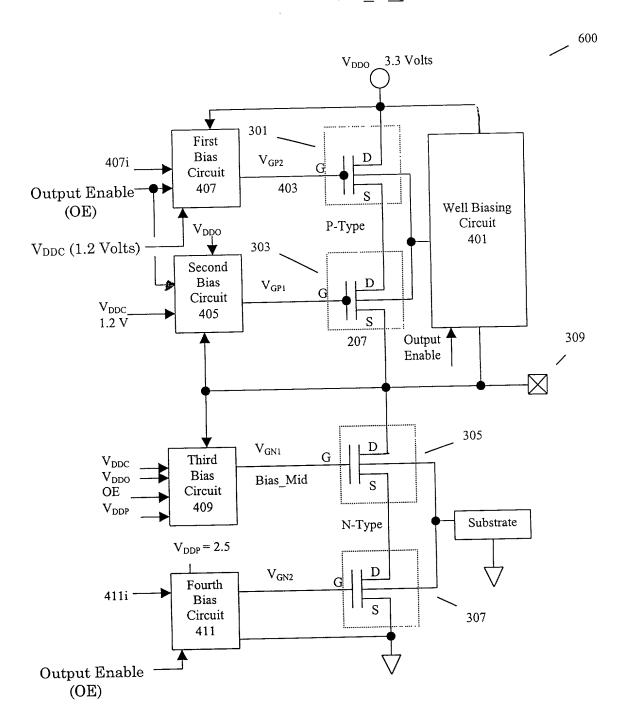


Figure 6

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajit:
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 7 of 23

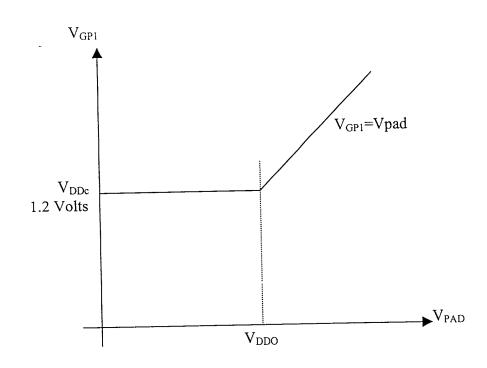


Figure 7

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanen S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 8 of 23

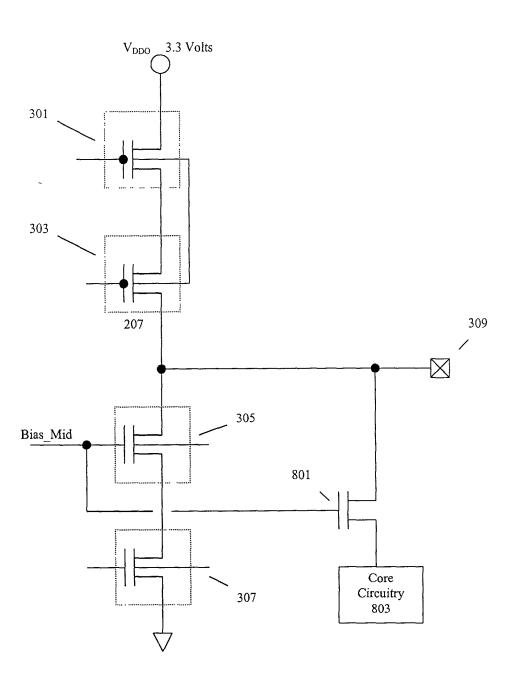


Figure 8

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 9 of 23

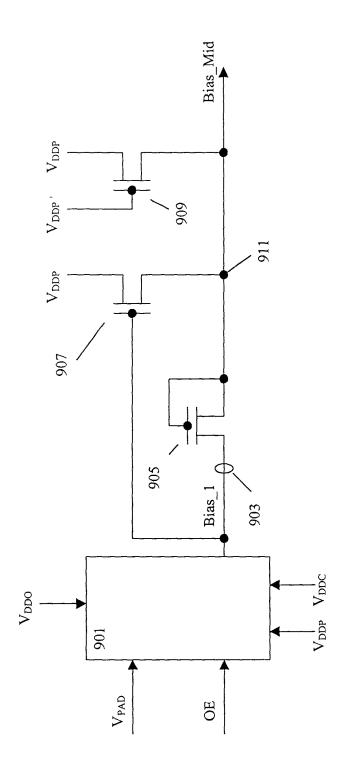


Figure 9A

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 10 of 23

VDDO -907c \_ 908c -> Bias-Miel -909c VSSC (alternately VDDC or VDDP)

Figure 9B

Attorney: Docket No.: Nicholas J. Pauley 41980/NJP/B600

Inventor(s): Janardhanan S'Ajit
Title: SUB-MICRON HIGH INPUT JOLTAGE, TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 11 of 23

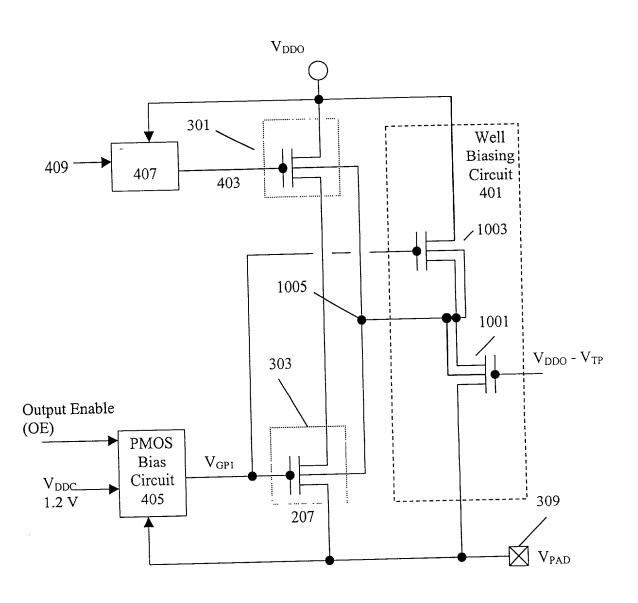


Figure 10

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 12 of 23

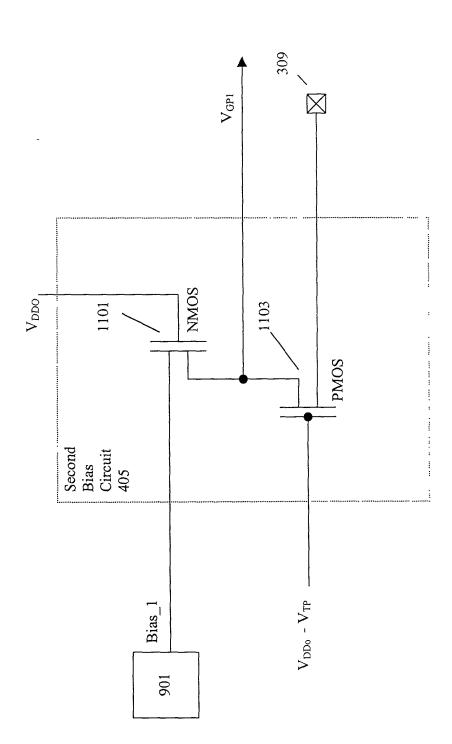


Figure 11A

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B800
Inventor(s): Janardhanan S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 13 of 23

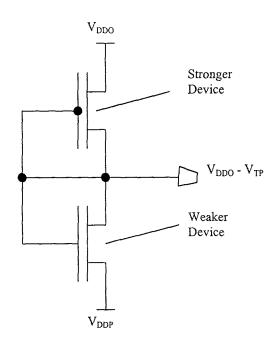


Figure 11B

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 14 of 23

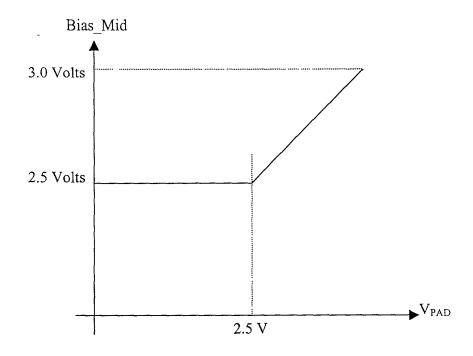
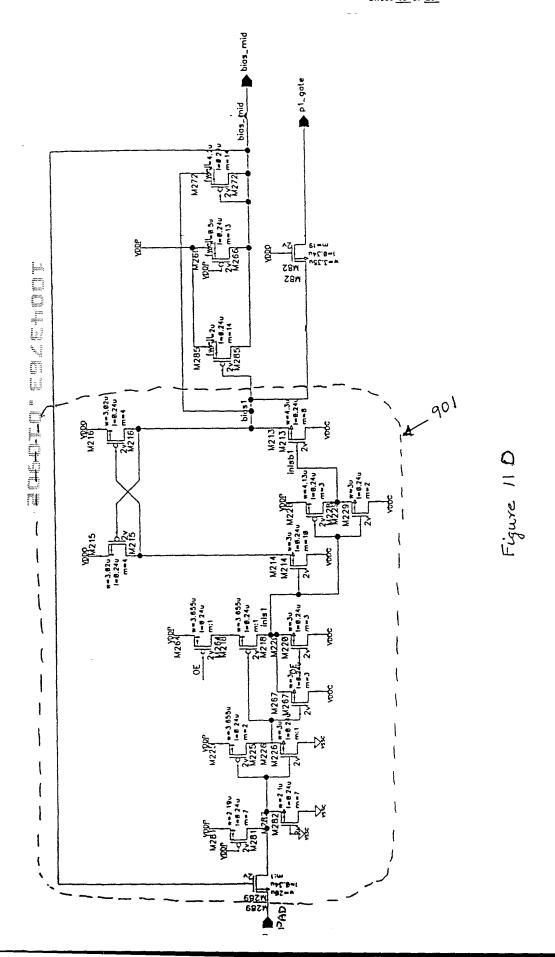


Figure 11C

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhainan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 15 of 23



Attorney: Nicholas J. Pauley

Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajıt

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS

Sheet 16 of 23

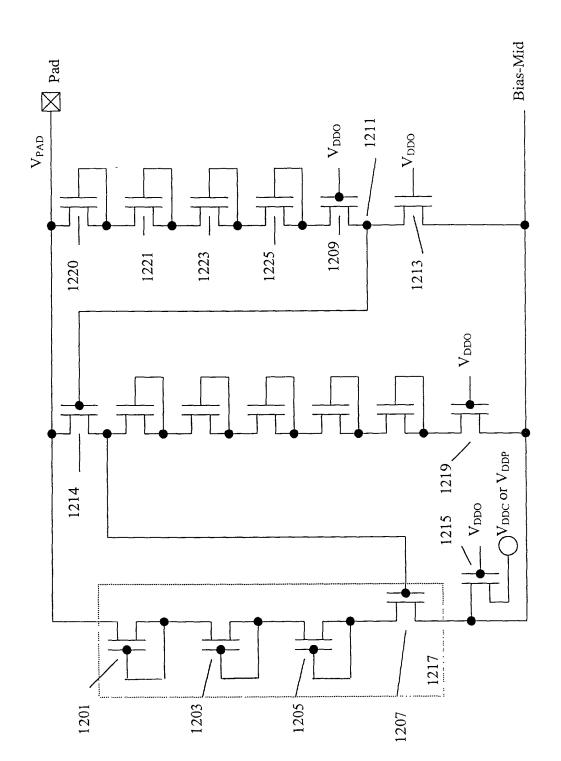
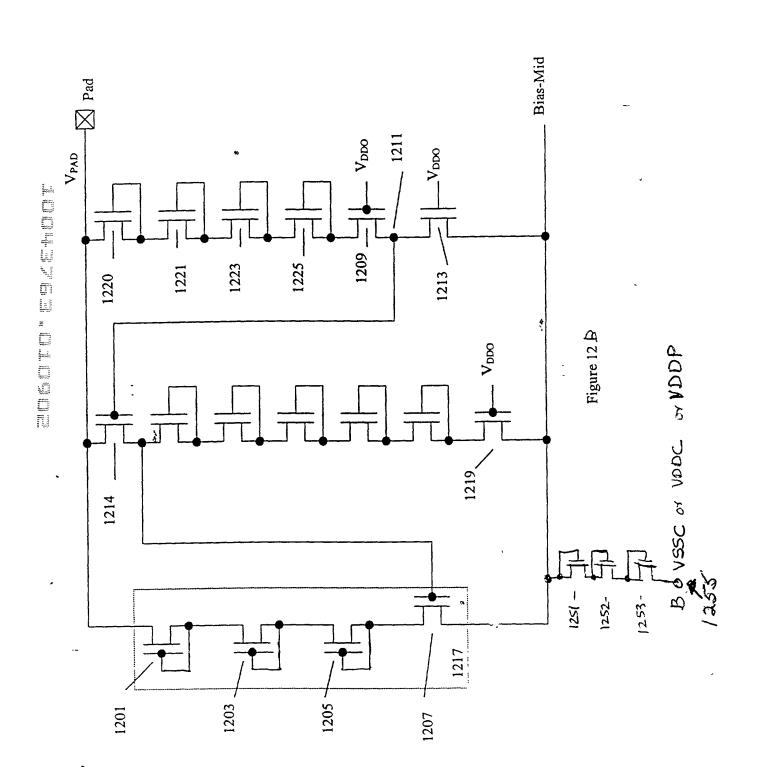


Figure 12A

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 17 of 23

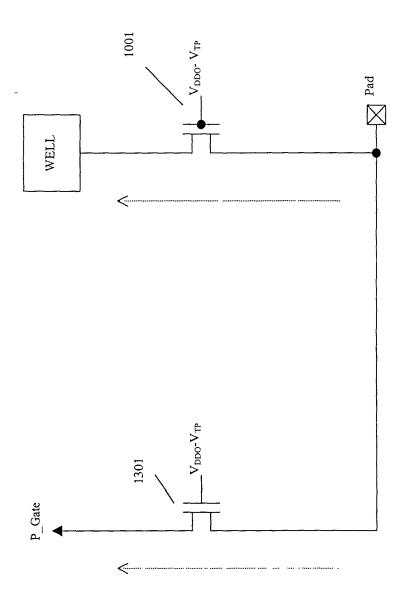


Attorney: Nicholas J. Pauley

Docket No.: 41980/NJP/B600

Inventor(s): Janardhanan S. Ajit

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 18 of 23



Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 19 of 23

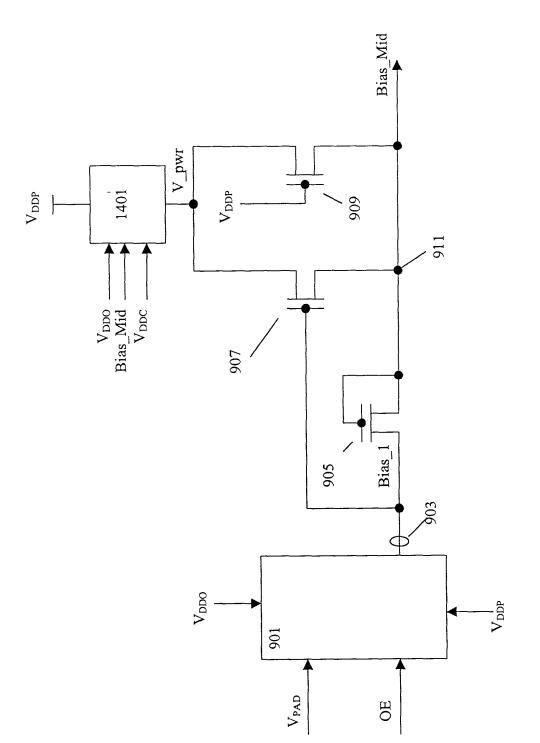


Figure 14

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 20 of 23

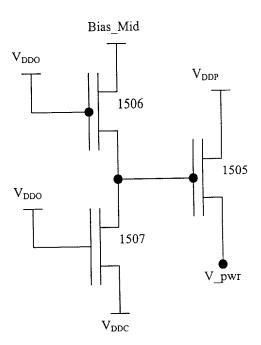


Figure 15

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S. Ajıt
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS
Sheet 21 of 23 ZBW ZBW M213 

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Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanań S Ajit

Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES LARGE POWER SUPPLY VARIATIONS

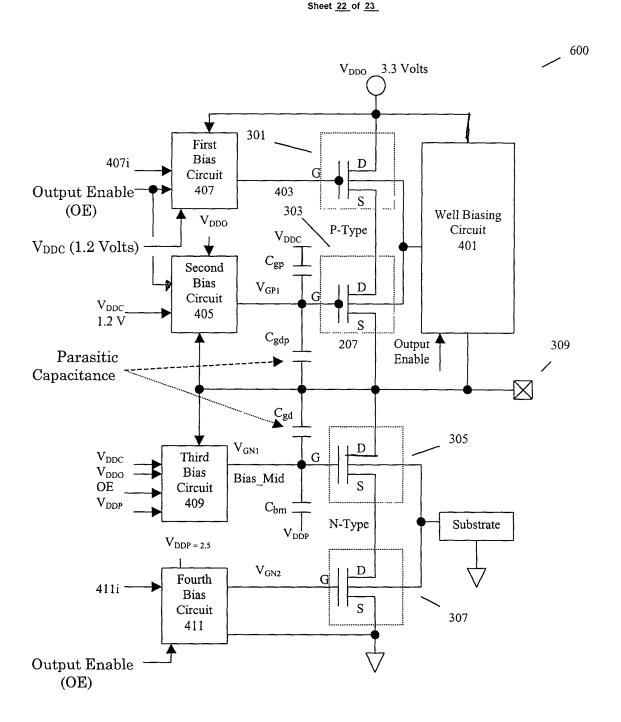


Figure 17

Attorney: Nicholas J. Pauley
Docket No.: 41980/NJP/B600
Inventor(s): Janardhanan S Ajit
Title: SUB-MICRON HIGH INPUT VOLTAGE TOLERANT
INPUT OUTPUT (I/O) CIRCUIT WHICH ACCOMMODATES
LARGE POWER SUPPLY VARIATIONS

Sheet <u>23</u> of <u>23</u>

VDDO VDDO 407 301 PRE-DRIVER DATA WELL FOR DRIVER PMOS OE VDDC VDDO VDDC VOPI 303 -1220 VODO LALISON T Saar NOOD NOON OUR 305 901 Bias\_Mid 905 909€ -910c NODC VDDO -VDDP PRE-DRIVER ₹-307 DATA -FOR DRIVER NMOS OE 411 ♥ VSSC VSSO

FIGURE 18